

In the Claims:

1 1. [Currently Amended] A printing system comprising the following:
2 firmware associated with the printing system;
3 a communications device adapted and constructed to facilitate
4 communication between the printing system and a remote source of information;
5 an automatic remote firmware update mechanism adapted to selectively
6 and automatically retrieve firmware upgrade information from the remote source
7 of information via the communications device, and to selectively and
8 automatically install the firmware upgrade information into the firmware of the
9 printing system; and
10 wherein the firmware upgrade information comprises information
11 configured to effect at least one operation of a printer of the printing system
12 with respect to the formation of a hard image upon media using the printer;
13 flag means for storing a value corresponding to an update trigger
14 parameter;
15 flag parameter update means for incrementally increasing the update
16 trigger parameter in response to a sensed condition; and
17 trigger means for actuating the automatic remote firmware update
18 mechanism to automatically retrieve firmware upgrade information when the
19 update trigger parameter reaches a predetermined update value.

1 2. [Previously Presented] A printing system according to claim 1,
2 wherein the automatic remote firmware update mechanism comprises a part of
3 firmware installed in the imaging printing system.

1 3. [Previously Presented] A printing system according to claim 1,
2 wherein the communications device is selected from a group consisting of a
3 modem and a network interface card.

1 4. [Previously Presented] A printing system according to claim 3,
2 wherein the communication device further comprises means for connecting to,
3 and accessing information from, a web site.

1 5. Cancel.

1 6. [Currently Amended] A printing system according to claim [[5]] 1,
2 wherein the flag parameter update means incrementally increases the update
3 trigger parameter value in response to page count through the imaging system.

1 7. [Currently Amended] A printing system according to claim [[5]] 1,
2 wherein the flag parameter update means incrementally increases the update
3 trigger parameter value in response to the passage of a predetermined amount of
4 time.

1 8. [Currently Amended] A printing system according to claim [[5]] 1,
2 further comprising means for periodically checking the update trigger parameter.

1 9. [Previously Presented] A printing system according to claim 1,
2 further comprising means for comparing downloaded firmware upgrade
3 information to existing firmware to determine the necessity of installing the
4 downloaded firmware upgrade information.

1 10. [Previously Presented] A printing system according to claim 1,
2 further comprising means for notifying a system user when firmware is to be
3 upgraded.

1 11. [Currently Amended] In a printing system including firmware and a
2 communications device adapted and constructed to facilitate communication
3 between the imaging device and a remote source of information, a method of
4 updating firmware comprising the following:

5 selectively and automatically retrieving firmware upgrade information from
6 the remote source of information via the communications device; and

7 selectively installing the firmware upgrade information into the firmware
8 of a printer of the printing system;

9 storing a value corresponding to an update trigger parameter;

10 sensing a condition;

11 incrementally increasing the update trigger parameter in response to the
12 sensed condition; and
13 actuating the automatic remote firmware update mechanism to
14 automatically retrieve firmware upgrade information when the update trigger
15 parameter reaches a predetermined update value.

1 12. [Previously Presented] A method according to claim 11, wherein
2 retrieving firmware upgrade information comprises retrieving firmware upgrade
3 information from a web site.

1 13. Cancel.

1 14. [Currently Amended] A method according to claim ~~[[13]]~~ 11,
2 wherein sensing a condition comprises sensing page count through the imaging
3 printing system, and the step of incrementally increasing the update trigger
4 parameter comprises incrementally increasing the update trigger parameter value
5 in response to page count through the imaging system.

1 15. [Currently Amended] A method according to claim ~~[[13]]~~ 11,
2 wherein sensing a condition comprises sensing the passage of time, and the
3 step of incrementally increasing the update trigger parameter comprises
4 incrementally increasing the update trigger parameter value in response to the
5 passage of a predetermined amount of time.

1 16. [Currently Amended] A method according to claim ~~[[13]]~~ 11,
2 further comprising periodically checking the update trigger parameter.

1 17. [Previously Presented] A method according to claim 11, further
2 comprising comparing downloaded firmware upgrade information to existing
3 firmware to determine the necessity of installing the downloaded firmware
4 upgrade information.

1 18. [Previously Presented] A method according to claim 11, further
2 comprising notifying a system user when firmware has been upgraded.

1 19. [Currently Amended] A printer comprising the following:
2 firmware installed in the printer;
3 a communications device adapted and constructed to facilitate
4 communication between the printer and a remote device containing firmware
5 upgrade information; and
6 an automatic remote firmware update mechanism adapted to sense a
7 condition of the printer, to selectively and automatically retrieve firmware
8 upgrade information from the remote device via the communications device
9 responsive to the sensed condition comprising a defined state, and to selectively
10 and automatically install the firmware upgrade information into the firmware of
11 the printer.

1 20. [Previously Presented] A printer according to claim 19, wherein the
2 automatic remote firmware update mechanism is adapted to selectively and
3 automatically download firmware update image files from the remote device.

1 21. [Previously Presented] A printer according to claim 19, further
2 comprising:
3 a print engine configured to print hard images upon media; and
4 a housing configured to at least partially house the firmware, the print
5 engine and the automatic firmware update mechanism.

1 22. [Currently Amended] An apparatus comprising:
2 a printer configured to form hard images upon sheets of media;
3 wherein the printer comprises:
4 initial firmware provided at a first moment in time, and wherein the
5 initial firmware is accessed to implement operations of the printer with respect
6 to the formation of hard images upon the sheets of media using the printer;
7 a communications device adapted to communicate with a source
8 located externally of the printer; and

9 circuitry coupled with the communications device and configured
10 to initiate communication with the source to automatically request and access
11 additional firmware from the source at a second moment in time after the first
12 moment in time using the communications device and to render the additional
13 firmware accessible within the printer to implement operations of the printer
14 with respect to the formation of hard images upon the sheets of media using the
15 printer.

1 23. [Previously Presented] The apparatus of claim 22 wherein the
2 additional firmware updates the initial firmware.

1 24. [Previously Presented] The apparatus of claim 22 wherein the
2 additional firmware replaces at least a portion of the initial firmware.

1 25. [Previously Presented] The apparatus of claim 22 wherein the
2 additional firmware comprises firmware in addition to the initial firmware.

1 26. [Previously Presented] The apparatus of claim 22 wherein the
2 second moment in time is after deployment of the printer by a user.

1 27. [Previously Presented] The apparatus of claim 22 wherein the
2 circuitry is configured to render the additional firmware accessible without user
3 input.

1 28. [Previously Presented] The apparatus of claim 22 wherein the
2 circuitry comprises an automatic remote firmware update mechanism.

1 29. [Previously Presented] The apparatus of claim 22 wherein the
2 printer further comprises:

3 a print engine configured to form the hard images upon the sheets of
4 media; and

5 a housing configured to at least partially house the initial firmware, the
6 additional firmware, the communications device, the circuitry and the print

7 engine.

1 30. [New] A printer according to claim 19 wherein the sensed
2 condition of the printer comprises a page count, and the defined state comprises
3 the page count reaching a defined number.

1 31. [New] A printer according to claim 19 wherein the sensed
2 condition of the printer comprises a passage of time, and the defined state
3 comprises the passage of time reaching a defined duration.

1 32. [New] A printer according to claim 19 wherein the automatic
2 remote firmware update mechanism is configured to retrieve the firmware
3 upgrade information directly from the remote device comprising an originating
4 source of the firmware upgrade information.

1 33. [New] The apparatus of claim 22 wherein the circuitry is
2 configured to initiate the communication with the source responsive to a page
3 count of the printer reaching a defined number.

1 34. [New] The apparatus of claim 22 wherein the circuitry is
2 configured to initiate the communication with the source responsive to a
3 passage of a defined amount of time.

1 35. [New] The apparatus of claim 22 wherein the circuitry is
2 configured to access the additional firmware directly from the source comprising
3 an originating source of the additional firmware.